

**Claims:**

1. An aerosol comprising droplets of an aqueous dispersion of nanoparticles, said nanoparticles comprising insoluble therapeutic or diagnostic agent particles having a surface modifier on the surface thereof.
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2. An aerosol according to claim 1 wherein said therapeutic agent is beclomethasone dipropionate.
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3. An aerosol according to claim 1 wherein said diagnostic agent is benzoic acid, 3,5-bis(acetylamino)2,4,6-triodo-, 4-(ethyl-3-ethoxy-2-butenoate) ester (WIN 68209).
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4. A method for forming an aerosol of an aqueous dispersion of nanoparticles, said nanoparticles comprising insoluble therapeutic or diagnostic agent particles having a surface modifier on the surface thereof, said method comprising the steps of:
  - a) providing a suspension of said nanoparticles; and
  - b) nebulizing said suspension so as to form an aerosol.
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5. A method of treating a mammal comprising the steps of:
  - a) forming an aerosol of an aqueous dispersion of nanoparticles, said nanoparticles comprising insoluble therapeutic agent particles having a surface modifier on the surface thereof;
  - b) administering said aerosol to the respiratory system of said mammal.
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6. A method according to claim 5 wherein said aerosol is administered in a manner such that it reaches the lung.
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7. A method according to claim 6 wherein said nanoparticles contain beclomethazone.
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8. A method of diagnosing a mammal, said method comprising the steps of:
  - a) forming an aerosol of an aqueous dispersion of

nanoparticles, said nanoparticles comprising insoluble diagnostic imaging agent particles having a surface modifier on the surface thereof; and

b) administering said aerosol to the respiratory system of said mammal; and

5 c) imaging said imaging agent in said respiratory system.

9. A method according to claim 8 wherein said diagnostic imaging agent is benzoic acid, 3,5bis(acetylamino)-2,4,6-triodo-, 4-(ethyl-3-ethoxy-2butenoate) ester (WIN 68209).

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*A*  
*A'*  
*Add B<sup>1</sup>*  
*Add B<sup>2</sup>*  
*Add C<sup>1</sup>*